



## Complete Summary

### TITLE

Major depression in adults in primary care: percentage of patients who have had a response to treatment at six months (+/- 30 days) after initiating treatment, e.g., have had a Patient Health Questionnaire (PHQ-9) score decreased by 50% from initial score at six months (+/- 30 days).

### SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 May. 94 p. [295 references]

## Measure Domain

### PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of patients who have had a response to treatment at six months (+/- 30 days) after initiating treatment, e.g., have had a Patient Health Questionnaire (PHQ-9) score decreased by 50% from initial score at six months (+/- 30 days).

### RATIONALE

The priority aim addressed by this measure is to improve the outcomes of treatment for major depression.

### PRIMARY CLINICAL COMPONENT

Major depression; response to treatment; Patient Health Questionnaire (PHQ-9) score

## **DENOMINATOR DESCRIPTION**

Number of adult patients older than 18 years with a new primary care diagnosis\* of major depression who have remained under depression management within their primary care clinic for six months

Suggested International Classification of Diseases, Ninth Revision (ICD-9) codes include: 296.2x, 296.3x.

\*New diagnosis = no diagnosis in the six-month period prior to the target quarter.

## **NUMERATOR DESCRIPTION**

Number of patients whose quantitative symptom assessment tool (Patient Health Questionnaire [PHQ-9]) administered six months (+/- 30 days) after initiating treatment, decreased by 50% or more from initial assessment tool administered

### **Evidence Supporting the Measure**

## **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

### **Evidence Supporting Need for the Measure**

## **NEED FOR THE MEASURE**

Unspecified

### **State of Use of the Measure**

## **STATE OF USE**

Current routine use

## **CURRENT USE**

Internal quality improvement

### **Application of Measure in its Current Use**

## **CARE SETTING**

Physician Group Practices/Clinics

## **PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Advanced Practice Nurses  
Nurses  
Physicians

## **LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Group Clinical Practices

## **TARGET POPULATION AGE**

Age greater than 18 years

## **TARGET POPULATION GENDER**

Either male or female

## **STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

### **Characteristics of the Primary Clinical Component**

## **INCIDENCE/PREVALENCE**

In a national survey from the World Health Organization of more than 9,000 adults age 18 and over, the prevalence of major depression was 6.7 percent.

## **EVIDENCE FOR INCIDENCE/PREVALENCE**

Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005 Jun;62(6):617-27. [PubMed](#)

## **ASSOCIATION WITH VULNERABLE POPULATIONS**

- Women (including pregnant and postpartum women). The rate of perinatal depression in the general population has been 10% to 15%. A recent large scale study by Kaiser Permanente concluded that during the time period measured, defined as 39 weeks prior to becoming pregnant through 39 weeks after delivery, the authors found approximately one in seven women was identified with and treated for depression, and more than half of these women had recurring indicators for depression.
- Depression in the elderly is widespread, often undiagnosed and usually untreated. The rate of depression in adults older than 65 years of age ranges from 7% to 36% in medical outpatient clinics and increases to 40% in the hospitalized elderly.

## **EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS**

Dietz PM, Williams SB, Callaghan WM, Bachman DJ, Whitlock EP, Hornbrook MC. Clinically identified maternal depression before, during, and after pregnancies ending in live births. *Am J Psychiatry* 2007 Oct;164(10):1515-20. [PubMed](#)

Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, Brody S, Miller WC. Perinatal depression: prevalence, screening accuracy, and screening outcomes: summary. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005 Feb. 8 p.(Evidence report/technology assessment; no. 119). [77 references]

Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 May. 94 p. [295 references]

## **BURDEN OF ILLNESS**

- Major depression is a treatable cause of pain, suffering, disability and death.
- The estimate of the lifetime prevalence of suicide in those ever hospitalized for suicidality is 8.6%. The lifetime risk is 4% for affective disorder patients hospitalized without specification of suicidality.
- Cardiovascular disease, diabetes and chronic pain are common comorbidities in patients with depression.
- Major depression is associated with an increased risk of developing coronary artery disease, and has also been shown to increase the risk of mortality in patients after myocardial infarction by as much as four-fold. Moderate to severe depression before coronary artery bypass graft (CABG) surgery and/or persistent depression after surgery increases the risk of death after CABG more than two-fold compared to non-depressed patients.
- Depression earlier in life increases the risk of developing diabetes by twofold.
- In a national survey from the World Health Organization (WHO), major depression was second only to back and neck pain for having the greatest effect on disability days, at 386.6 million U.S. days per year. In another WHO study of more than 240,000 people across 60 countries, depression was shown to produce the greatest decrease in quality of health compared to several other chronic diseases. Health scores worsened when depression was a comorbid condition, and the most disability combination was depression and diabetes.

## **EVIDENCE FOR BURDEN OF ILLNESS**

Blumenthal JA, Lett HS, Babyak MA, White W, Smith PK, Mark DB, Jones R, Mathew JP, Newman MF, NORG Investigators. Depression as a risk factor for mortality after coronary artery bypass surgery. *Lancet* 2003 Aug 23;362(9384):604-9. [PubMed](#)

Bostwick JM, Pankratz VS. Affective disorders and suicide risk: a reexamination. *Am J Psychiatry* 2000 Dec;157(12):1925-32. [PubMed](#)

Frasure-Smith N, Lespérance F, Talajic M. Depression and 18-month prognosis after myocardial infarction. *Circulation* 1995 Feb 15;91(4):999-1005. [PubMed](#)

Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); May 2008. 84 p. [244 references]

Katon W, von Korff M, Ciechanowski P, Russo J, Lin E, Simon G, Ludman E, Walker E, Bush T, Young B. Behavioral and clinical factors associated with depression among individuals with diabetes. *Diabetes Care* 2004 Apr;27(4):914-20. [PubMed](#)

Merikangas KR, Ames M, Cui L, Stang PE, Ustun TB, Von Korff M, Kessler RC. The impact of comorbidity of mental and physical conditions on role disability in the US adult household population. *Arch Gen Psychiatry* 2007 Oct;64(10):1180-8. [PubMed](#)

Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *Lancet* 2007 Sep 8;370(9590):851-8. [PubMed](#)

Rugulies R. Depression as a predictor for coronary heart disease: a review and meta-analysis. *Am J Prev Med* 2002 Jul;23(1):51-61. [163 references] [PubMed](#)

Schonfeld WH, Verboncoeur CJ, Fifer SK, Lipschutz RC, Lubeck DP, Buesching DP. The functioning and well-being of patients with unrecognized anxiety disorders and major depressive disorder. *J Affect Disord* 1997 Apr;43(2):105-19. [PubMed](#)

Wulsin LR, Singal BM. Do depressive symptoms increase the risk for the onset of coronary disease? A systematic quantitative review. *Psychosom Med* 2003 Mar-Apr;65(2):201-10. [53 references] [PubMed](#)

## **UTILIZATION**

Unspecified

## **COSTS**

In the United States, depression costs employers \$24 billion in lost productive work time.

## **EVIDENCE FOR COSTS**

Stewart WF, Ricci JA, Chee E, Hahn SR, Morganstein D. Cost of lost productive work time among US workers with depression. *JAMA* 2003 Jun 18;289(23):3135-44. [PubMed](#)

## **Institute of Medicine National Healthcare Quality Report Categories**

## **IOM CARE NEED**

Getting Better  
Living with Illness

## **IOM DOMAIN**

Effectiveness

### **Data Collection for the Measure**

## **CASE FINDING**

Users of care only

## **DESCRIPTION OF CASE FINDING**

Adults older than 18 years with a new primary care diagnosis\* of major depression

The primary source of data would be a registry. Other possible sources include claims or encounter data, scheduling information, and list of diagnosis codes.

The suggested time period for data collection is a calendar month.

\*New diagnosis = no diagnosis in the six-month period prior to the target quarter.

## **DENOMINATOR SAMPLING FRAME**

Patients associated with provider

## **DENOMINATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Number of adult patients older than 18 years with a new primary care diagnosis\* of major depression who have remained under depression management within their primary care clinic for six months

Suggested International Classification of Diseases, Ninth Revision (ICD-9) codes include: 296.2x, 296.3x.

\*New diagnosis = no diagnosis in the six-month period prior to the target quarter.

### **Exclusions**

Unspecified

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Clinical Condition

## **DENOMINATOR TIME WINDOW**

Time window is a fixed period of time

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Number of patients whose quantitative symptom assessment tool (Patient Health Questionnaire [PHQ-9]) administered six months (+/- 30 days) after initiating treatment, decreased by 50% or more from initial assessment tool administered

### **Exclusions**

Unspecified

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## **NUMERATOR TIME WINDOW**

Fixed time period

## **DATA SOURCE**

Administrative data  
Registry data

## **LEVEL OF DETERMINATION OF QUALITY**

Not Individual Case

## **OUTCOME TYPE**

Clinical Outcome

## **PRE-EXISTING INSTRUMENT USED**

Patient Health Questionnaire (PHQ-9)

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV TR)

## **Computation of the Measure**

## **SCORING**

Rate

## **INTERPRETATION OF SCORE**

Better quality is associated with a higher score

## **ALLOWANCE FOR PATIENT FACTORS**

Unspecified

## **STANDARD OF COMPARISON**

Internal time comparison

## **Evaluation of Measure Properties**

## **EXTENT OF MEASURE TESTING**

Unspecified

## **Identifying Information**

## **ORIGINAL TITLE**

Percentage of patients who have had a response to treatment at six months (+/- 30 days) after initiating treatment, e.g., have had a PHQ-9 score decreased by 50% from initial score at six months (+/- 30 days).

## **MEASURE COLLECTION**

[Major Depression in Adults in Primary Care Measures](#)

## **DEVELOPER**

Institute for Clinical Systems Improvement

## **FUNDING SOURCE(S)**

The following Minnesota health plans provide direct financial support: Blue Cross and Blue Shield of Minnesota, HealthPartners, Medica, Metropolitan Health Plan, PreferredOne and UCare Minnesota. In-kind support is provided by the Institute for Clinical Systems Improvement's (ICSI) members.

## **COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

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## **FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

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No work group members have potential conflicts of interest to disclose.

## **ADAPTATION**

Measure was not adapted from another source.

## **RELEASE DATE**

2008 May

## **REVISION DATE**

2009 May

## **MEASURE STATUS**

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); May 2008. 84 p.

## **SOURCE(S)**

Institute for Clinical Systems Improvement (ICSI). Major depression in adults in primary care. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009 May. 94 p. [295 references]

## **MEASURE AVAILABILITY**

The individual measure, "Percentage of Patients Who Have Had a Response to Treatment at Six Months (+/- 30 Days) After Initiating Treatment, e.g., Have Had a PHQ-9 Score Decreased by 50% from Initial Score at Six Months (+/- 30 Days)," is published in "Health Care Guideline: Major Depression in Adults in Primary Care." This document is available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: [www.icsi.org](http://www.icsi.org); e-mail: [icsi.info@icsi.org](mailto:icsi.info@icsi.org).

## **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on June 30, 2008. This NQMC summary was updated by ECRI Institute on December 7, 2009.

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